

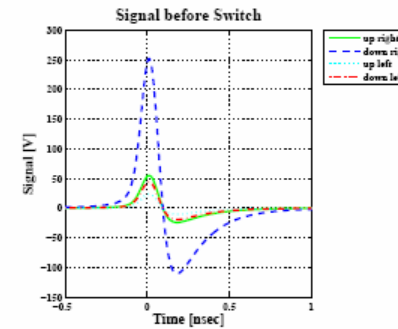
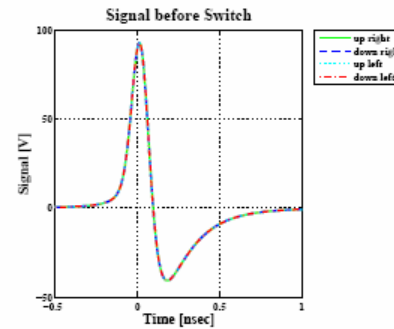
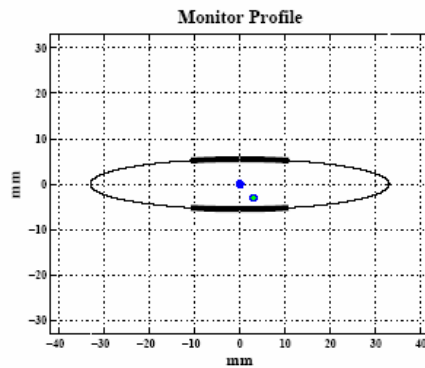
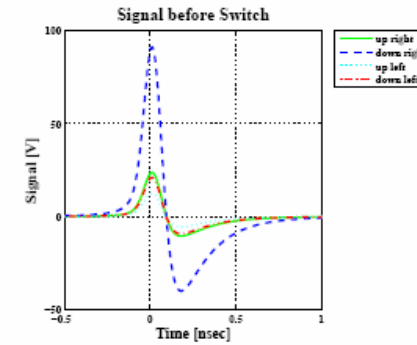
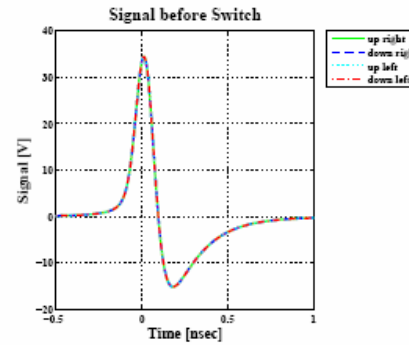
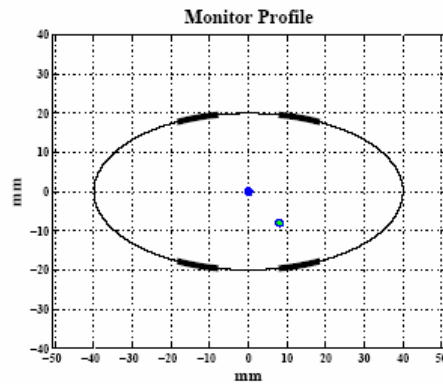
High Peak Voltage Input Signal and the Libera

Igor Krupchenkov
DESY

Estimation of the Signal Levels for the Petra-III BPMs*

Centered beam

Beam offset



E=6GeV, I=100mA, 40 bunches equally distributed in the machine

* by Gero Kube

Probable solutions



- The cables with high attenuation

- Attenuators block



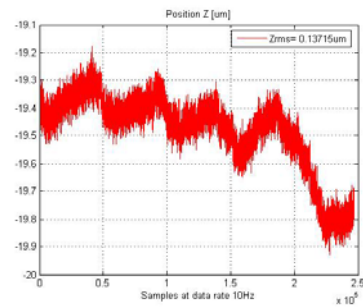
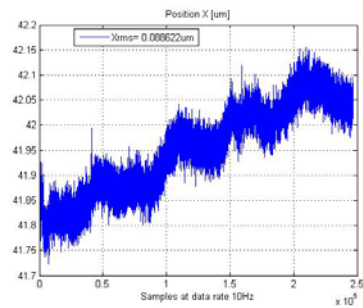
- Band-pass filters



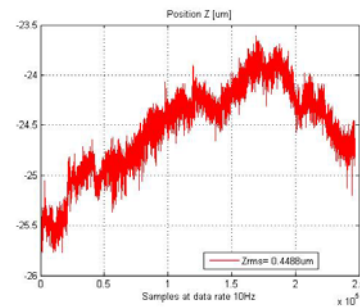
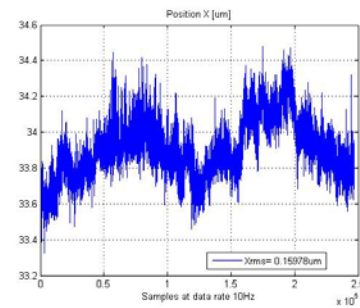
7-hour stability

	7-hour stability, peak-peak		RMS noise	
	X [μm]	Z [μm]	X [μm]	Z [μm]
Direct connection	0,4	0,7	0,089	0,137
With the BPF	0,9	2	0,160	0,449
With the Attenuators	0,45	0,35	0,104	0,065

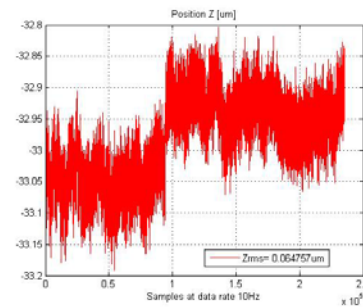
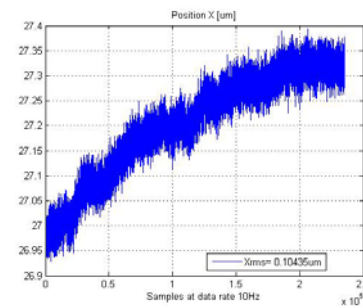
Direct measurements



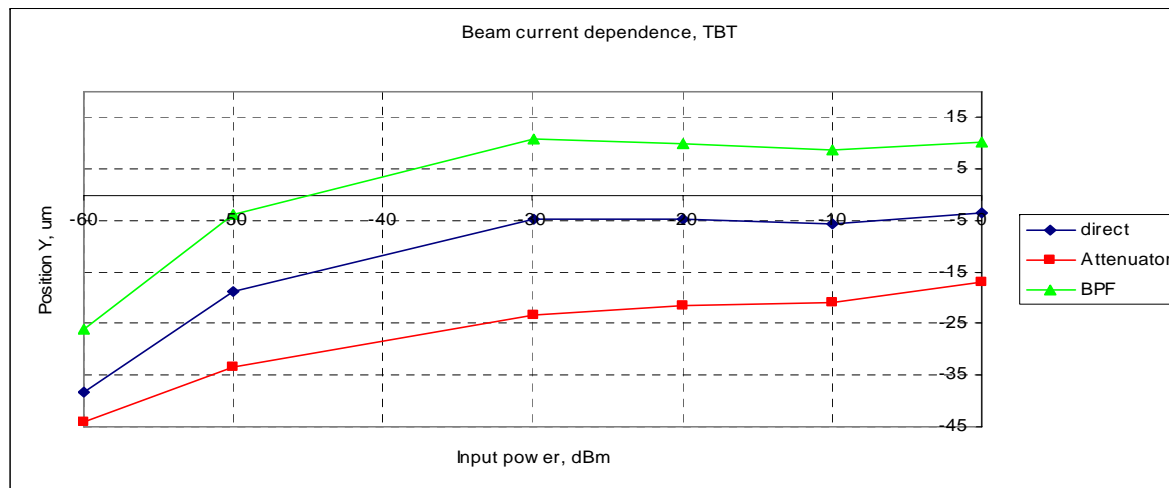
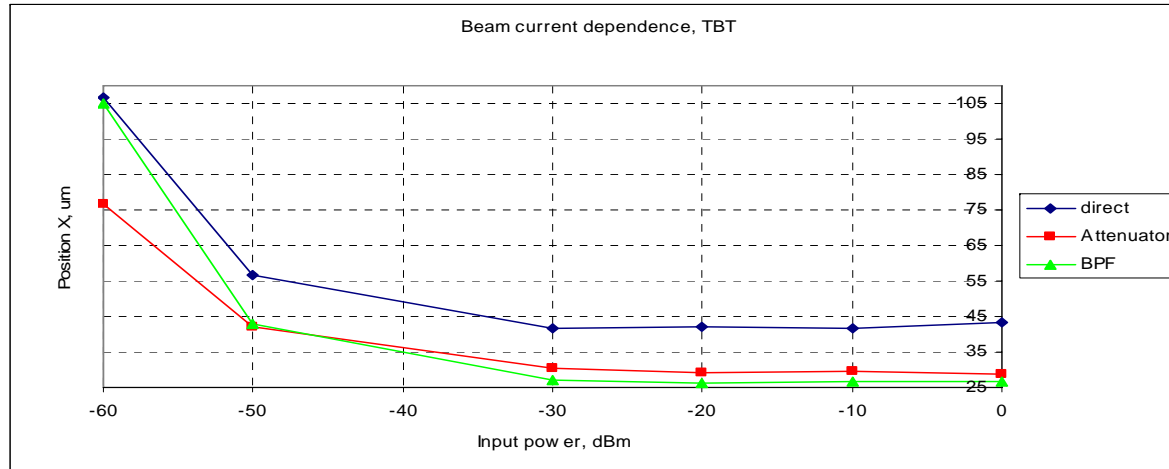
with the BPFs



with the Attenuators



Beam Current Dependence, TBT



Resolution, TBT

